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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CASCA, FRED A	
ART UNIT	PAPER NUMBER
2617	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/733,856	HAYEM ET AL.	
	Examiner	Art Unit	
	Fred A. Casca	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 December 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21, 23, 24,and 27* is/are rejected.

7)☒ Claim(s) *22, 25-26* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on December 8, 2006. Claims 1-1-27 are still pending in the present application. **This Action is made FINAL.**

2. Acknowledgement is made of applicant's claim for priority based on an application filed under (SN: 60/434,448) on 12/18/2002. It is noted, however, that the priority application (SN: 60/434,448) does not include or mention the inventive concepts claimed in the present application. In particular, there is no mention of synchronization in the priority application, let alone disclosure of "timing synchronization between said first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor". Therefore the priority date claimed by the applicant is denied.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1 and 9 have been amended to contain new matter. The phrase "**host baseband processor enables timing of synchronization**" has been added to independent claims 1 and 9 has not been described in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 4-5, 8-9 20, and 24, 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann et al (U.S. Pub. No. 2002/0141441 A1), in view of Kransmo (US Patent No. 6,594,242 B1).

Referring to claim 1, Neumann discloses a multi-mode wireless communication device (abstract, and paragraph 0004, "dual mode", telephone have been developed, in which the telephone is useable in two networks),

comprising a host baseband processor configured to operate in accordance with a first wireless communications protocol of a first wireless communications system (figures 2-8B, paragraphs 0019-0021, "first and second baseband processors", "GSM","TDMA"),

and a baseband co-processor configured to operate in accordance with a second wireless communications protocol of a second wireless communications system (figures 2-8B, paragraphs 0019-0021, 0038, 0034, 0030, 0025, "first and second baseband processors", "GSM","TDMA").

Neumann further teaches establishing, within said device, timing synchronization between the first and the second processors (paragraph 21, note that "The GSM master processor controls audio input/output and an RF front end circuit in both the first and second mode", further note that the GSM master processor and the TDMA co-processor are coupled together providing a synchronous I/O on the GSM master processor side, hence it is inherent that a timing synchronization exists between the system of GSM master processor and the system of TDMA co-processor so that the audio Input/Output is controlled by the GSM processor).

Neumann does not specifically disclose timing synchronization between the first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor.

Kransmo discloses host baseband processor enables timing of synchronization between the first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor (figures 1-3, abstract, col. 1, lines 41-44, 50-67, col. 2, lines 1-32, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "timing of WCDMA timeframes 54 and GSM TDMA timeframes 50", "a 3G mobile terminal can synchronize with a GSM carrier based on the frame timing in order to handover or roam", "the MS 12 synchronizes 3G with the 2G network", "dual-mode wireless mobile . . . that operate in both 2G and 3G", "handover and roaming of a wireless terminal from a third generation . . . to a second generation (2G) communication system", "faster synchronization between networks", **Note that synchronization takes place between two processors. It is well known in the art that synchronization takes place between two processors only when both processors permit that synchronization process, thus both processors enable the process of synchronization. Otherwise, in case one of the processors is unable to permit synchronization, in other words one of the processors doesn't enable synchronization, then the synchronization wouldn't take place. Thus, it is inherent that the host baseband processor enables timing of synchronization.** Further note that a dual-mode mobile terminal capable of operating and roaming in two different systems is provided. Inherently during the roaming process from a 3G system to a 2G system the dual-mobile terminal switches communication operations from a first processor that processes communications of 3G type to a second processor that processes communications of a 2G type so that the call is successfully handed over. Further note that synchronization takes place between the two different systems. In order for this synchronization to take place, the processor processing the 3G communications inherently sends timing information to the processor that processes the 2G communications, thus synchronization between two systems takes place on the basis of timing information transferred from the 3G processor to the 2G processor).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the device of Neumann by incorporating the teachings of Kransmo, and providing timing synchronization between the first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor, for the purpose of faster synchronization, receiving the transmitted signals at the receiver in the order that they were received, preventing loss of information due to out of order message at the receiver, and preventing confusion at the receivers.

Referring to claim 4, the combination of Neumann/Kransmo disclose the multi-mode communications device of claim 1, and further disclose means for establishing timing synchronization includes means for reading a current value of at least one timer maintained by baseband co-processor consistent with said second wireless communications protocol (Kransmo, figures 1-3, abstract, col. 1, lines 41-44, 50-67, col. 2, lines 1-32).

Referring to claim 5, the combination of Neumann/Kransmo disclose the device of claim 1, and further disclose host baseband processor further includes a higher-layer processing module and a modem for interfacing with said first wireless communication system, said higher-layer processing module being operatively coupled to said modem and to a baseband interface of said baseband co-processor (Neumann, figures 2-8B, paragraphs 0019-0021, 0038, 0034, 0030, 0025).

Referring to claim 8, the combination of Neumann/Kransmo disclose the device of claim 1, and further disclose host baseband processor includes a higher-layer processor configured to effect higher-layer processing of information processed by said baseband co-processor (Neumann, figures 2-8B, paragraphs 0019-0021, 0038, 0034, 0030, 0025).

Referring to claim 5, claim 5 recites features analogous to the features of the device of claims 1, 4 and 5 (as rejected above). Thus, the combinations of Neumann/Kransmo disclose all elements of claims 24 (please see the rejection of claim 1, 4 and 5 above).

Referring to claim 9, Neumann discloses a timing synchronization method (Abstract, figures 2-8B, paragraph 21), comprising:

configuring a host baseband processor of a multi-mode device to operate in accordance with a first wireless communications protocol of a first wireless communications system (figures 2-8B, paragraphs 0019-0021, "first and second baseband processors", "GSM","TDMA"),

configuring a baseband co-processor of a multi-mode device to operate in accordance with a second wireless communications protocol of a second wireless communications system (figures 2-8B, paragraphs 0019-0021, 0038, 0034, 0030, 0025, "first and second baseband processors", "GSM","TDMA");

Neumann further teaches establishing, within said device, timing synchronization between the first and the second processors (paragraph 21, note that "The GSM master processor controls audio input/output and an RF front end circuit in both the first and second mode", further note that the GSM master processor and the TDMA co-processor are coupled together providing a synchronous I/O on the GSM master processor side, hence it is inherent that a timing synchronization exists between the system of GSM master processor and the system of TDMA co-processor so that the audio Input/Output is controlled by the GSM processor).

Neumann does not specifically disclose timing synchronization between said first and second communication systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor.

Kransmo discloses host baseband processor enables timing of synchronization between said first and second communication systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor (figures 1-3, abstract, col. 1, lines 41-44, 50-67, col. 2, lines 1-32, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "timing of WCDMA timeframes 54 and GSM TDMA timeframes 50", "a 3G mobile terminal can synchronize with a GSM carrier based on the frame timing in order to handover or roam", "the MS 12 synchronizes 3G with the 2G network", "dual-mode wireless mobile . . . that operate in both 2G and 3G", "handover and roaming of a wireless terminal from a third generation . . . to a second generation (2G) communication system", "faster synchronization between networks", **Note that synchronization takes place between two processors. It is well known in the art that**

synchronization takes place between two processors only when both processors permit that synchronization process, thus both processors enable the process of synchronization. Otherwise, in case one of the processors is unable to permit synchronization, in other words one of the processors doesn't enable synchronization, then the synchronization wouldn't take place. Thus, it is inherent that the host baseband processor enables timing of synchronization. Further note that a dual-mode mobile terminal capable of operating and roaming in two different systems is provided. Inherently during the roaming process from a 3G system to a 2G system the dual-mobile terminal switches communication operations from a first processor that processes communications of 3G type to a second processor that processes communications of a 2G type so that the call is successfully handed over. Further note that synchronization takes place between the two different systems. In order for this synchronization to take place, the processor processing the 3G communications inherently sends timing information to the processor that processes the 2G communications, thus synchronization between two systems takes place on the basis of timing information transferred from the 3G processor to the 2G processor).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Neumann by incorporating the teachings of Kransmo, and providing timing synchronization between the first and second wireless communications systems on the basis of timing information transferred to said host baseband processor from said baseband co-processor, for the purpose of faster synchronization, receiving the transmitted signals at the receiver in the order that they were received, preventing loss of information due to out of order message at the receiver, and preventing confusion at the receivers.

Referring to claim 20, claim 20 defines a device reciting features analogous to the features of the device of claim 1 (as rejected above). Thus, the combinations of Neumann/Kransmo disclose all elements of claims 20 (please see the rejection of claim 1 above).

Referring to claims 24, 25, 26, and 27, claims 24, 25, 26, and 27 define a device reciting features analogous to the features of the device of claims 5-8 (as rejected

above. Thus, the combinations of Neumann/Kransmo disclose all elements of claims 24-27 (please see the rejection of claims 5-8 above).

Referring to claim 27, the combinations of Neumann/Kransmo disclose all elements of claim 20 as rejected above, and further disclose the baseband processor comprises a higher layer processor configured to effect higher-layer processing information (see rejection of claim 1).

6. Claims 2, 10-15, and 17-19, 21, 233 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann et al (U.S. Pub. No. 2002/0141441 A1), in view of Kransmo (US Patent No. 6,594,242 B1) and further in view of Schutte (US Patent No. 5251220).

Referring to claim 2, the combinations of Neumann/Kransmo disclose the device of claim 1, and inherently disclose establishing timing synchronization includes means for issuing, from host baseband processor, **an interrupt** to the baseband co-processor during a predetermined timer phase of said first wireless communications system (Kransmo, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "timing of WCDMA timeframes 54 and GSM TDMA timeframes 50", note that an interrupt is inherent in order to alert the processor that receives the interrupt about the absolute time of the event in the synchronization process).

The combinations of Neumann/Kransmo does not specifically disclose establishing timing synchronization includes means for issuing, from host baseband processor, **a timer capture interrupt** to the baseband co-processor during a predetermined timer phase of said first wireless communications system.

Schutte discloses **a timer capture interrupt** (col. 4, line 65 through col. 5, line 18, and col. 2, lines 7-32, "timer capture interrupt", "synchronizing").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the device of Neumann/Kransmo by incorporating the teachings of Schutte, and consequently providing a timer capture interrupt during a predetermined timing phase, so that a timer value is captured and compared to other captured time values.

Referring to claim 10, the combinations of Neumann/Kransmo disclose the method of claim 9, and further disclose establishing includes issuing an interrupt to said baseband co-processor (Kransmo, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "timing of WCDMA timeframes 54 and GSM TDMA timeframes 50", note that an interrupt is inherent in order to alert the processor that receives the interrupt about the absolute time of the event in the synchronization process).

The combinations of Neumann/Kransmo do not specifically disclose a timer capture interrupt.

Schutte discloses **a timer capture interrupt** (col. 4, line 65 through col. 5, line 18, and col. 2, lines 7-32, "timer capture interrupt", "synchronizing").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Neumann/Kransmo by incorporating the teachings of Schutte, and consequently providing a timer capture interrupt during a predetermined timing phase, so that a timer value is captured and compared to other captured time values.

Referring to claim 11, the combination of Neumann/Kransmo/Schutte disclose the method of claim 10, and further disclose establishing further includes providing at least one timer value pertinent to a timing state of said second wireless communications system to the host baseband processor in response to issuance of said timer capture interrupt (Kransmo, paragraphs col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21).

Referring to claim 12, the combination of Neumann/Vaglica disclose the method of claim 9, and further disclose establishing includes reading a current value of at least one timer maintained by said baseband co-processor consistent with said second wireless communications protocol (Neumann, paragraphs 27-34, 38-41).

Referring to claim 13, the combination of Neumann/Kransmo/Schutte disclose the method of claim 11, and further disclose the second wireless communications protocol comprise a WCDMA, and establishing including storing at least one timer value and an additional timer value pertinent to an additional timing state of said second wireless communications system in first and second registers of baseband co-processor (Kransmo,

col. 1, lines 15-45, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "timing of WCDMA timeframes 54 and GSM TDMA timeframes 50").

Referring to claim 14, the combination of Neumann/Kransmo/Schutte disclose the method of claim 9, and further disclose host baseband processor is further configured to effect higher-layer processing of information processed by said baseband co-processor (Neumann, figures 2-8B, paragraphs 0019-0021, 0038, 0034, 0030, 0025).

Referring to claim 15, Neumann discloses a method for wireless communication (Abstract, figures 2-8B), the method comprising:

generating within a multi-mode communication device, a first wireless communication system, wherein said multi-mode communication device communicates via a first wireless protocol with said first wireless communication system, and said multi-mode communication device communicates via a second wireless protocol with a second wireless communication system (figures 2-8B abstract, and paragraph 4, 6, 9, 19-21, "first and second baseband processors", "GSM","TDMA" "dual mode").

Neumann does not specifically disclose a timer capture interrupt during a predetermined timing phase, storing a timer value of at least one time pertinent to operation of said second wireless communication system in response to timer capture interrupt, reading the timer value, and determining a timing relationship between first and second wireless communication systems based upon timer value.

Schutte discloses a timer capture interrupt during a predetermined timing phase, storing a timer value of at least one time pertinent to operation of second communication system in response to timer capture interrupt and reading the timer value (col. 4, line 65 through col. 5, line 18, and col. 2, lines 7-32, "timer capture interrupt", "synchronizing", note that a timer capture interrupt signal is provided to alert the system controller read the event report and to determine the absolute time of the event).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the device of Neumann by incorporating the teachings of Schutte, and consequently providing a timer capture interrupt during a predetermined timing phase, storing a timer value of at least one time pertinent to operation of second communication system in response to timer capture interrupt and reading the timer value,

for the purpose causing the system controller to read the event report and to determine an absolute time of the event, which is very important in the process of synchronization.

The combination of Neumann/Schutte does not specifically disclose determining a timing relationship between first and second wireless communication systems based upon timer value.

Kransmo discloses determining a timing relationship between first and second wireless communication systems based upon timer value (abstract, col. 1, lines 41-44, 50-67, col. 2, lines 1-32, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21, "**timing of WCDMA timeframes 54 and GSM TDMA timeframes 50**", "a 3G mobile terminal can synchronize with a GSM carrier based on the frame timing in order to handover or roam", "the MS 12 synchronizes 3G with the 2G network", "dual-mode wireless mobile . . . that operate in both 2G and 3G", "handover and roaming of a wireless terminal from a third generation . . . to a second generation (2G) communication system", "faster synchronization between networks").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the method of Neumann/Schutte by incorporating the teachings of Kransmo, and consequently providing determining a timing relationship between first and second wireless communication systems based upon timer value for the purpose of establishing synchronization between the networks, so that roaming can take place efficiently, receiving the transmitted signals at the receiver in the order that they were received, preventing loss of information due to out of order message at the receiver, and preventing confusion at the receivers.

Referring to claim 17, the combination of Neumann/Kransmo/Schutte disclose the method of claim 15, and inherently disclose one or more timers are incremented pursuant to operation of the first wireless communication system, determining a timing relationship including comparing at least one value of the one or more timers with the timer value (Kransmo, col. 4, lines 10-20, col. 4, lines 30-56, col. 5, lines 7-21).

Referring to claim 18, the combinations of Neumann/Schutte/Kransmo disclose the method of claim 15, and further disclose said first wireless communications system operates in accordance with a first wireless communications protocol and said second

wireless communications system operates in accordance with a second wireless communications protocol different from said first wireless communications protocol (Neumann, abstract, and paragraphs 2-9, TDMA, GSM).

Referring to claims 21 and 23, claims 21 and 23 defines an apparatus reciting features analogous to the features of the apparatus of claims 2, and (as rejected above). Thus, the combinations of Neumann/Kransmo/Schutte disclose all elements of claims 21 and 23 (please see the rejection of claim 2 above).

Referring to claim 18, the combinations of Neumann/Schutte/Kransmo disclose the method of claim 15, and further disclose said first wireless communications system operates in accordance with a first wireless communications protocol and said second wireless communications system operates in accordance with a second wireless communications protocol different from said first wireless communications protocol (Neumann, abstract, and paragraphs 2-9, TDMA, GSM).

Referring to claim 19, the combination of Neumann/Kransmo/Schutte disclose the method of claim 18, and further disclose said first wireless communications protocol comprises GSM (Neumann, paragraphs 19-21).

The combination of Neumann/Kransmo/Schutte does not specifically the second wireless communications protocol comprises WCDMA.

The examiner takes official notice of the fact that a WCDMA network well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time of the invention to incorporate the teachings of prior art by providing a WCDMA network to the method of Neumann/Kransmo/Schutte, for the purpose of serving a wider network of clients.

7. Claim 16, 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neumann et al (U.S. Pub. No. 2002/0141441 A1), in view of Kransmo (US Patent No. 6,594,242 B1) and further in view of Schutte (US Patent No. 5251220) and still further in view of Moretti et al (US Patent No. 6098178).

Referring to claim 16, the combinations of Neumann/Kransmo/Schutte disclose the method of claim 15.

The combination of Neumann/Kransmo/Schutte does not specifically disclose storing an **additional timer** value of at least one other timer pertinent to operation of the second wireless communication system in response to the timer capture interrupt; reading said additional timer value, said timing relationship being based at least in part upon **additional timer value**.

Moretti discloses **additional timer and additional timer value** (abstract, and col. 1, lines 14-21, and col. 2, lines 24-67).

It would have been obvious to one of the ordinary skill in the art at the time of invention to incorporate the teachings of prior art to the method of Neumann/Kransmo/Schutte, and consequently providing storing an **additional timer** value of at least one other timer pertinent to operation of the second wireless communication system in response to the timer capture interrupt; reading said additional timer value, said timing relationship being based at least in part upon **additional timer value,** for the purpose of providing an absolute accurate timing of the event.

Allowable Subject Matter

8. Claims 22, 25 and 26, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claim 2, 10-15, and 17-19, the applicant argues that Neumann/Kransmo does not disclose "generating within a multi-mode communication device, a timer capture interrupt during a predetermined timing phase of a first wireless communication system,

..., determining a timing relationship between said first and second wireless communication systems based upon said timer value,". The examiner respectfully disagrees with applicant's arguments for the following reasons:

The combinations of Neumann/Kransmo clearly disclose a multi-mode communication device that allows timing synchronizations (see rejection of claim 1). It is well known in the art that timing synchronization involves determining a timing relationship between communication devices, and it also well known that any synchronization process must have a timer value to start with, compare with, and set up the process with. Hence, the combinations of Neumann/Kransmo disclose the inherent sup-processes and sub-routines that are involved in the process of timing synchronization and duel processor communications. The only element that the combinations of Neumann/Kransmo do not specifically mention in their inventions is "a timer capture interrupt". "Timing capture interrupt" concept has been very well known in the art for many years (as described clearly in Schutte). One skilled in the art of Electrical and Computer Engineering would have easily been able to realize and combine the well known concept of timing capture interrupt into that of the combinations of Neumann/Kransmo.

10. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case Neumann discloses a duel processing communications system, where any person of skill in the art would know that a timing synchronization would be required for a duel processor system, hence combinable with Kransmo. Timing capture interrupts is well know and used in timing synchronizations processes, thus combinable with Schutte.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CHARLES APPIAH
PRIMARY EXAMINER